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Overcrowding in Emergency Departments: Effects on Patients

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Recently there has been increased discussion on the overcrowded conditions in many of California's emergency departments.^{1,2,3} A recent article published in the *Western Journal of Medicine* details the result of a comprehensive survey among directors of California EDs.¹ Over 96% reported episodic overcrowding in EDs and some reported nearly daily overcrowding. The results are also similar to that conducted in a survey nationally that included both teaching and non-teaching hospitals. Although the causes of overcrowding are complex and multifactorial, the key reason for overcrowding is because EDs are too small and understaffed for the population they serve. The impact of overcrowding deserves discussion. There are multiple effects of overcrowding and it is unfortunate that our patients have to suffer because EDs do not have the capacity to serve the public. Some of the effects of overcrowding that I have discovered in my discussions with emergency physicians throughout the state include the following:

1. Long waits for care. Long waits are the most common complaints from ED patients. A consequence of these delays includes the potential for minor medical problems to become more serious. Patients are unhappy with long waits and this dissatisfaction is reflected in an increasing number of patients who leave without being seen.
2. Prolonged pain and suffering. As a result of overcrowding, patients may experience prolonged pain and suffering because they are at the "back of the line." (*Cont. on page 3*)

About CAL-AAEM

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President's Message continued

Here is why we have founded CAL/AAEM: to complement CAL/ACEP's efforts in conditions where its comprehensive strategy cannot effectively serve the rank and file EP. Concerns of antitrust and about the divisiveness of certain issues limit the ability of CAL/ACEP to move in specific arenas, the way CAL/AAEM can. In addition, national strife between ACEP and AAEM resulted in many of our members choosing not to join CAL/ACEP due to the mandatory requirement to join national ACEP. Many EPs perceive the national organization to be staff-driven (as opposed to physician-driven), and to be unevenly influenced by corporate strategies on practice issues specifically. Others see it as slow in its response, or as a trade organization that does not consistently or effectively represent the individual needs of the rank and file emergency physician.

We certainly look forward to the national reunification of the voice of EM. CAL/AAEM will actively seek to work with CAL/ACEP to reunite the national house of EM. In the meantime, we shall encourage our members to **participate, belong and/or contribute to CAL/ACEP and to CAL/AAEM**. Dual membership is certainly making us stronger in our effort to reunify the house. Perhaps what is most important is to work together and to **contribute to our California EMPAC funds**.

Until the national groups are able to reunite, we hope CAL/ACEP will continue its effort working with us to minimize the divisiveness in the voice of EM at the state and national level. CAL/AAEM believes that the current open channels of communications and mutual appreciation would help. At other times, such divisiveness may be necessary and yet possibly constructive. It will certainly be conducted with respect and courtesy. CAL/AAEM will seek to address only a limited number of practice issues. It will attempt to do it with and through CAL/ACEP. And it will do it alone only when it finds the best interest of the rank and file EP is being inadequately represented due to anti-trust concern or national restrictive policies.

Most of all, we shall focus most of our effort on the struggle to protect the practicing EPs from the continuing dangerous trend of "Exit Strategies." While vested equity in a group is legitimate, we strongly oppose the current forms of sale of contracts to corporate entities: the future income potential of practicing EPs is being robbed. The wellbeing of patients and physicians is being jeopardized. We basically shall not avoid taking stances on issues of importance because it may offend some powerful entities, other EPs, or certain non-democratic groups, their leaders or their owners. We shall seek what is right, fair and ethical.

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Dr. Kazzi is also a member of the Boards of the American Academy of Emergency Medicine, and the California Chapter of the American College of Emergency Physicians.

Overcrowding (cont.)

3. Violence. Tempers flare and a few patients tend to become more agitated and violent in crowded conditions. Instances of violence have occurred in various ED waiting rooms over who is to be seen first, creating a hostile atmosphere. Bodily harm has occurred to both nursing staff and emergency physicians.
4. Lost "Golden Hour." Bad outcome have resulted from overcrowded conditions. Patients with subtle presentations of serious diseases such as MI, PE, rupturing aortic aneurysms, ectopic pregnancy, or stroke may miss the "golden hour" of effective treatment waiting on a gurney in the hallway. Additionally, patients with serious infections such as sepsis, pneumonia or meningitis may experience delays which result in bad outcome. I am aware of a patient who sat in an ER waiting room for four hours with Fournier's Gangrene, and as a result had a bad outcome. As physicians are seeing more complex and acutely ill patients, some feel they do not have adequate time to thoroughly evaluate each patient.
5. Ambulance diversions. Ambulance diversion has increased both in urban and suburban areas. The consequences of these diversions include significantly increased transport times, risk of traffic accidents en route, and potential for poor clinical outcome.
6. Increased errors in treatment. Feeling rushed and under time pressure results in errors and risk for malpractice or legal action. Decision errors have resulted from miscommunication during periods of overwhelming patient volume. With increasing numbers of patients, errors such as mislabeled specimens or drug dosing also increase in frequency.

The problem of overcrowding in EDs will not improve until hospitals invest money to improve service. EM physicians need to be active and vocal at the local, state, and national levels and demand legislation aimed at improving the overcrowding problem.

References

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Clinical Review (cont.)

appear to have a role in prevention of seizures from head injury in the alcoholic patient. Phenothiazines and butyrophenones are generally thought to increase risk of seizure in this subgroup, but no studies have demonstrated this specifically. These drugs appear to have little effect on the GABA receptor, and are rarely selected as first-line agents.

BZDs, which first appeared in the 1950s, are the most commonly used pharmacologic agents for alcohol withdrawal. These drugs are GABA receptor agonists which increase the frequency of chloride channel openings, and undergo hepatic metabolism exclusively. The half-life varies considerably between specific drugs, and depends on lipid solubility and activity of specific metabolites. Longer acting BZDs (half-life 20-80 hours) such as diazepam and chlordiazepoxide tend to be more lipid soluble and require less frequent dosing after discharge from the emergency department from auto-tapering. However, the lipid-soluble metabolites, such as nordiazepam, tend to accumulate over time. This may be a problem for patients with compromised hepatic function, which chronic alcoholics tend to have. The shorter acting agents (half-life 2-20 hours) such as lorazepam and triazolam are converted into water-soluble metabolites that are quickly excreted by the kidneys.

Phenobarbital, first synthesized in 1912, has been used in the past for alcohol withdrawal but has fallen out of favor, as BZDs have become more widely used and have a putative greater margin of safety. The exact mechanism of barbiturates is unclear, but it is known that barbiturates bind to the GABA receptor and increase the duration of chloride channel opening. This is in contrast to BZDs, which increase the frequency of openings. This may in part explain the need for more frequent dosing of BZDs compared to phenobarbital.⁽⁴⁾ Phenobarbital also enhances the activity of the microsomal ethanol oxidizing system, which aids in the metabolism of ethanol. The metabolites of phenobarbital are inactive, and the drug is eliminated very slowly by the liver. The half-life for phenobarbital can be up to 5 days, making it ideal for outpatient disposition from the emergency department. Patients presenting with uncomplicated alcohol withdrawal, with perhaps seizures and mild to moderate tremor, may be candidates for outpatient treatment and disposition. For clinicians selecting a BZD, it is often necessary to give multiple doses before adequate sedation is achieved. This requires more time and attention from the emergency physician in the reassessment of the situation. These patients may respond well to administration of BZDs in the ED and, because of the limited half-life, will require a prescription for more of the drug to prevent relapse. This places the burden of filling the prescription and taking the pills at the proper time intervals on the patient. Often this is too much responsibility for the chronic alcoholic.

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Landmark Trial Starts

By Howard Davis, MD, FAAEM, FACEP

June 30, 2000, marked an historic day for the specialty of Emergency Medicine. On that day, ACHP (Affiliated Community Healthcare Physicians) submitted its trial documents in the case of ACHP v. CHW (Catholic Healthcare West). With the support of the American Academy of Emergency Medicine, the California Medical Association, the California Society of Anesthesiologists, the California Radiology Society and the California Society of Pathologists, a group of practicing Emergency Physicians (EPs) and other Hospital Based Physicians has taken on a multibillion

dollar hospital corporation. The trial may last through the summer and into the fall.

For those unfamiliar with the case, a brief summary follows: In October of 1997 CHW announced the purchase of "the management arm" of EPMG (Emergency Physicians Medical Group). The purchase price was \$40 million and I believe most of this went to a handful of top shareholders. The working EPs in EPMG, many of whom received nothing from this purchase, were tied to this management arm (renamed "Meriten") by a thirty-year contract which provided a thirty-

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